



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,073	12/01/2003	Eiji Ohta	09792909-5742	2729
26263	7590	08/14/2006	EXAMINER	
SONNENSCHN NATH & ROSENTHAL LLP			WALSH, DANIEL I	
P.O. BOX 061080				
WACKER DRIVE STATION, SEARS TOWER			ART UNIT	
CHICAGO, IL 60606-1080			PAPER NUMBER	
			2876	

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/725,073	OHTA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Daniel I. Walsh	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 May 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,6-9 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,6-9 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12-05</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Receipt is acknowledged of the Amendment received on 26 May 2006 and IDS of 30 December 2005.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 7-9, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota et al. (JP 2002-163624).

Ota et al teaches an IC card with an IC chip 5 mounted on an insulating substrate 1 having an antenna coil 3, and a chip reinforcing plate (9, 9') provided on at least an IC mounted surface of the insulating substrate 1, a core layer 13 comprising a plurality of sheet materials

15,16 having an IC module disposed there between. The plurality of sheet materials comprise a pair of inner core sheets 15,16 that are adjacent to the IC module. Though Ota et al. is silent to through holes for the IC module, the examiner notes it is well known and conventional to have such a hole/recess in order to fit the IC module into the core, and therefore such modification is well known and conventional in the art, as an obvious expedient. For clarification purposes, the Examiner notes that FIG. 1 shows an arrangement where an IC chip and reinforcing plates are disposed in what appears to be a hole/cavity (interpreted as a through hole by the Examiner). In FIG. 1, the height of the hole on both sides appears to be substantially equal to that of the projections, thus satisfying the relationships set forth in the claims. The Examiner notes that as per FIG. 5 of the Applicants own Application, the projections are illustrated as being the distance between the insulating substrate and the reinforcing plate. Accordingly, the sum of the through holes (measured on both sides of the substrate), being substantially equal to the projection height, as the reinforcing plate is at the ends of the through holes, the limitations are met, as  $B1+C1$  is seen as substantially equal to  $A$ , which places it in the claimed range. It is interpreted by the Examiner that upon formation of the card by pressure, that a through hole can be created. As the claims do not recite that the through hole is cut before chip placement, that the through hole penetrates certain layers/sheets, Ota et al. is believed to read upon the claimed limitations. Additionally, the Examiner notes that the term "projection" is sufficiently broad. The claims have not recited what the projection is, and the Examiner notes that any reasonable interpretation can be applied by additional art, to meet the broad recitation of a projection.

Re claim 7, display layer 20 is a rewritable display layer.

Re claims 8-9, Ota et al. teaches the limitations (paragraph [0037]+)

Re claim 17, the limitations have been discussed above.

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ota et al., as discussed above, in view of Saito et al. (JP 11078324).

The teachings of Ota et al. have been discussed above.

Ota et al. is silent to an outer core sheet stacked on at least one of the pair of inner core sheets.

Saito et al. teaches outer core sheets (SOLUTION).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Ota et al. with those of Saito et al.

One would have been motivated to do this to increase impact resistance strength and heat resistance/protection.

#### ***Response to Arguments***

4. Applicant's arguments with respect to claims have been considered but are not persuasive. As discussed above, the Examiner notes that the dimensional relationship appear to be taught by the prior art, as the B1 and C1 appear to correspond to the size of the opening/through holes.

#### ***Additional Remarks***

5. The Examiner notes that Usami et al., as cited previously, teaches that the size of an IC chip is in the range of 30 micrometers. Additionally, multilayered cards (sheets) are well known in the art (US 5,346,576 6,352,767, 5,888,624, 5,304,513, and 5,026,452).

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

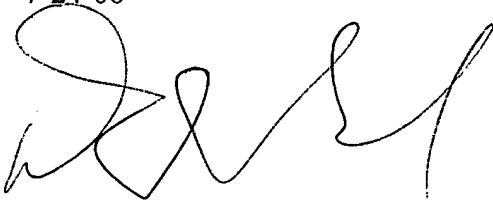
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel I. Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel I Walsh  
Examiner  
Art Unit 2876  
7-24-06



AHSHIK KIM  
PRIMARY EXAMINER